| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-----------|------|------------------------------|-------------------------------------------------------------------|---------------------|---------|------------------|
| S1 | 322 | (711/106).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 09:52 |
| S2 | 322 | 711/106.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 11:43 |
| S3 | 2 | "20040221098" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:08 |
| S4 | 8 | (super adj self adj refresh) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:09 |
| S5 | 322 | 711/106.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:10 |
| S6 | 2 | "20040221098" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:10 |
| S7 | 2 | S4 and (S5 S6) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:10 |
| S8 | 1 | (super adj refresh) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:10 |

| S9 | 3013 | (self adj refresh) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:20 |
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| S10 | 713 | elpida.as. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:20 |
| S11 | 7 | S10 and S4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/20 13:20 |
| S12 | 952 | ((ito adj yutaka) (aisu adj takayuki) (suzuki adj yukihide)).in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 09:54 |
| S13 | 67 | S12 and dram | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 09:58 |
| S14 | 79 | S12 and (dram refresh) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:22 |
| S15 | 12 | ("6446159" "6199139" "6147916" "4542454" "5623451" "5761143"). pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:54 |
| S16 | 11 | S14 and (super) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:23 |

| S17 | 3 | S14 and (super).clm. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:26 |
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| S18 | 0 | (S14 and (ecc).clm.) not (S14) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:26 |
| S19 | 0 | (S14 and (ECC).clm.) not (S14) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:26 |
| S20 | 8 . | (S14 and (ECC).clm.) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:26 |
| 521 | 7 | (S14 and (ECC).clm.) not S17 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:28 |
| S22 | 0 | (S14 and (bist).clm.) not (S17 S21) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:28 |
| S23 | 1 | (S14 and (bist).clm.) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 10:28 |
| S24 | 24 | ("4249253" "4319356" "4380812" "4617660" "4694454" "4758992" "4766573" "4935900" "5157634" "5267242" "5469559" "5644544" "5926429" "6065145" "6076183").PN. OR ("6199139"). URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 11:02 |
| S25 | 12 | S24 and (error adj correct\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 11:18 |

| S26 | 7 | S25 and (address with generat\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 11:20 |
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| S27 | 4 | S25 and (command with generat\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 11:22 |
| S28 | 8 | (super adj self adj refresh) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 11:26 |
| S29 | 0 | S28 and (error adj correct3) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 11:23 |
| S30 | 3 | S28 and (error adj correct\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 11:23 |
| S31 | 7 | (dram (dynamic adj ram) (dynamic adj random)).ab. and ((error adj correct\$3) ecc) and refresh and (user with command) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 11:45 |
| S32 | 44 | ((dram (dynamic adj ram) (dynamic adj random)) and ((error adj correct\$3) ecc) and refresh).ab. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 11:49 |
| S33 | 2 | "20020018389" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 16:19 |
| S34 | 2 | "20040221098" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:13 |
| S35 | 44 | ((dram (dynamic adj ram) (dynamic adj random)) and ((error adj correct\$3) ecc) and refresh).ab. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:26 |

| S36 | 0 | S35 and (user with encod\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:27 |
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| S37 | 0 | S35 and (user same encod\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:45 |
| S38 | 0 | S35 and ((self adj refresh) with (entry adj scheme)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:45 |
| S39 | 0 | S35 and ((self adj refresh) with (entry exit)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:46 |
| S40 | 307 | ((self adj refresh) with (entry exit)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR . | ON | 2005/12/21 13:46 |
| S41 | 15 | S40 and dram and (ecc (error adj correct\$3)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 16:21 |
| S42 | 9 | S41 and ((entry exit) with user) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:46 |
| S43 | 8 | S40 and dram and (self adj refresh same ((entry exit start end begin finish) with user)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 14:01 |

| S44 | 4 | S43 not S42 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:52 |
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| S45 | 2 | (S40 and dram and (self adj refresh same ((entry start begin enable) same user))) not (S42 S44) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 13:59 |
| S46 | 4 | (self adj refresh same ((entry start begin enable) with user)) not (S42 S44 S45) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 14:02 |
| S47 | 5 | (self adj refresh same ((entry start begin enable) same user)) not (S42 S44 S45 S46) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 14:41 |
| 548 | 10 | ("4542454" "4694454" "4758992" "5410507" "5623451" "5629898" "5761143" "6147916" "6199139").PN. OR ("6697992").URPN. | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 14:40 |
| S49 | 3 | S48 and (error adj correct\$3) | US-PGPUB; USPAT; USOCR | OR | ON | 2005/12/21 14:41 |
| S50 | 0 | (self adj refresh same ((entry start begin enable) same user)) and S48 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 14:41 |
| S51 | 7 | ("6414894" "6426908" "6512715"). pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 16:20 |
| S52 | 0 | S51 and dram and (ecc (error adj correct\$3)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 16:21 |

| S53 | 0 | S51 and (ecc (error adj correct\$3)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/21 16:21 |
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| S54 | 0 | "20030061536" and ((refresh adj period) with (check adj bit)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 11:16 |
| S55 | 0 | "20030061536" and ((refresh adj period) same (check adj bit)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 11:16 |
| S56 | 1 | "20030061536" and ((refresh adj period) same (parity adj bit)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 11:16 |
| S57 | 1 | "20030061536" and ((refresh adj period) with (parity adj bit)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 14:17 |
| S58 | 2 | "6829677".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 13:40 |
| S59 | 1 | "20030061536" and (address with generat\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 14:19 |
| S60 | 0 | "20030061536" and ((refresh adj counter) with increment\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 16:42 |

| S61 | 3 | (ito adj yutaka).in. and (write adj data and information adj data) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 16:49 |
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| S62 | 203 | (dram and error adj correction).ab. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 17:00 |
| S63 | 33 | (dram and error adj correct\$3).ti. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/22 17:02 |
| S64 | 2 | "20030093744" | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR . | ON | 2005/12/22 17:05 |
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| S66 | 2 | "5450422".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 14:33 |
| S67 | 19 | (ito adj yutaka).in. and cyclic | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 14:34 |
| S68 | 4 | (ito adj yutaka).in. and cyclic adj shift | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 14:41 |

| S69 | 3 | forward adj cyclic adj shift | US-PGPUB; USPAT; USOCR; | OR | ON | 2005/12/23 14:41 |
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| | | | EPO; JPO; DERWENT; IBM_TDB | | | |
| S70 | 10 | (US-20020018389-\$ or US-20020133663-\$ or US-20030061536-\$ or US-20030149929-\$ or US-20040221098-\$ or US-20040243886-\$).did. or (US-6199139-\$ or US-6697992-\$ or US-6829677-\$ or US-5450422-\$). did. | US-PGPUB; USPAT | OR | ON | 2005/12/23 16:09 |
| S71 | 3 | S70 and (shift adj register) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 14:55 |
| S72 | 0 | "20020018389" and (shift adj register same invert) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR . | ON | 2005/12/23 14:56 |
| S73 | 1 | "20020018389" and (shift adj register same invert\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 14:56 |
| S74 | 1 | "20040221098" and (shift adj register same invert\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:02 |
| S75 | 4 | error adj detect\$3 with (forward backward) adj shift\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:03 |
| S76 | 9 | error adj (correct\$3) with (forward backward) adj shift\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:05 |

| S77 | 2 | (error adj (correct\$3) same ((forward adj shift\$3) and backward adj shift\$3)) not (S75 S76) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:15 |
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| S78 | 287 | ((forward and backward) with (shift\$3))same error | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR · | ON | 2005/12/23 15:16 |
| S79 | 42 | ((forward and backward) with (shift\$3 and register))same error | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:33 |
| S80 | 13 | S79 and \$1ram | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:19 |
| S81 | 1 | (forward and backward) same cyclic adj shift\$3 same error | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:34 |
| S82 | 27 | ((forward adj shift\$3) and (backward adj shift)) same error | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:35 |
| S83 | 25 | S82 not S80 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:35 |
| S84 | 1 | S83 and \$1ram | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 15:35 |

| S85 | 99 | ("4980888" "6216246" "6216246" "3814922" "4617660" "4758992" "4766573" "4794597" "5553231" "6697992" "6735726" "6035044" "6141249" "5694383" "5831955" "5239526" "5357473" "5446741" "5495572" "5502573" "5508989" "5528571" "5586127" "5864569" "5873112" "5889938" "5941993" "6000039" "6161194" "6178537" "6188650" "6209113" "6266273" "6292868" "6349056" "6438665" "6560143" "6972993" "5930448" "6972585" "6195300" "4319356" "5502732" "5604755" "6065146" "6209074" "6859614" "5261068" "5313624" "5379415").pn. ("6044479" "6429984" "6628466" "6694451" "6546245" "5793774" "4598402" "4901228" "5521922" "5568274" "5623459" "5657464" "5664094" "5677901" "5694262" "5719982" "5752169" "5757921" "5781594" "5923811" "5953513" "5996107" "6115342" "6119260" "6158004" "6229660" "6243845" "6345374" "6374389" "6697915" "6792501" "6839875" "6915476" "4342084" "4399506" "4937783" "5008886" "5235693" "5402428" "5416907" "5465338" "5517626" "5546246" "56603001" "5640349" "5655150" "5696775").pn. | US-PGPUB; USPAT | OR | ON | 2005/12/23 16:10 |
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| S86 | 3 | S85 and (self adj refresh) and (error adj correct\$3) | US-PGPUB; USPAT | OR | ON | 2005/12/23 16:20 |
| S87 | 5459 | (714/1,6,48,52 711/105,106,162, 161).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 16:19 |
| S88 | 5459 | (714/1,6,48,52 711/105,106,162, 161).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2005/12/23 16:20 |
| S89 | 11 | S88 and (self adj refresh) and (error adj correct\$3) | US-PGPUB; USPAT | OR | ON | 2005/12/23 16:20 |



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| <u>#8</u> | (ram <and> (self <near 1=""> refresh) <and> (error <near 1=""> correction)) <in> pdfdata</in></near></and></near></and> | 13 |
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Low-voltage memories for power-aware systems

Kiyoo Itoh

August 2002 Proceedings of the 2002 international symposium on Low power electronics and design

Publisher: ACM Press

Full text available: pdf(281.56 KB) Additional Information: full citation, abstract, references, citings

This paper describes low-voltage RAM designs for stand-alone and embedded memories in terms of signal-to-noise-ratio designs of RAM cells and subthreshold-current reduction. First, structures and areas of current DRAM and SRAM cells are discussed. Next, low-voltage peripheral circuits that have been proposed so far are reviewed with focus on subthreshold-current reduction, speed variation, on-chip voltage conversion, and testing. Finally, based on the above discussion, a perspective is given with ...

Keywords: DRAM and SRAM cells, gain cells, gate-source/substrate-source back-biasing, memory-rich architectures, multi-Vr, non-volatile RAMs, on-chip voltage converters, peripheral circuits, subthreshold current, testing

2 Energy-aware design of embedded memories: A survey of technologies,



architectures, and optimization techniques Luca Benini, Alberto Macii, Massimo Poncino

February 2003 ACM Transactions on Embedded Computing Systems (TECS), Volume 2

Issue 1 **Publisher: ACM Press**

Full text available: Topdf(288.44 KB) Additional Information: full citation, abstract, references, index terms

Embedded systems are often designed under stringent energy consumption budgets, to limit heat generation and battery size. Since memory systems consume a significant amount of energy to store and to forward data, it is then imperative to balance power consumption and performance in memory system design. Contemporary system design focuses on the trade-off between performance and energy consumption in processing and storage units, as well as in their interconnections. Although memory design is as ...

Keywords: Embedded systems, embedded memories, integration, memories, nonvolatile, system-on-a-chip, volatile

Pen computing: a technology overview and a vision

André Meyer

July 1995 ACM SIGCHI Bulletin, Volume 27 Issue 3

Publisher: ACM Press

Full text available: ndf(5.14 MB) Additional Information: full citation, abstract, citings, index terms

This work gives an overview of a new technology that is attracting growing interest in